

signals for such conflicting routes display “stop” aspects; and (3) through normal contacts of time releases, time element relays, or timing devices for such conflicting routes, or contacts of relays repeating the normal position or normal state of such time releases, time element relays, or timing devices.

[49 FR 3385, Jan. 26, 1984]

**§ 236.312 Movable bridge, interlocking of signal appliances with bridge devices.**

When movable bridge is protected by interlocking the signal appliances shall be so interlocked with bridge devices that before a signal governing movements over the bridge can display an aspect to proceed the bridge must be locked and the track alined, with the bridge locking members within one inch of their proper positions and with the track rail on the movable span within three-eighths inch of correct surface and alinement with rail seating device on bridge abutment or fixed span. Emergency bypass switches and devices shall be locked or sealed.

[33 FR 19684, Dec. 25, 1968, as amended at 49 FR 3385, Jan. 26, 1984]

**§ 236.313 [Reserved]**

**§ 236.314 Electric lock for hand-operated switch or derail.**

Electric lock shall be provided for each hand-operated switch or derail within interlocking limits, except where train movements are made at not exceeding 20 miles per hour. At manually operated interlocking it shall be controlled by operator of the machine and shall be unlocked only after signals governing movements over such switch or derail display aspects indicating stop. Approach or time locking shall be provided.

**RULES AND INSTRUCTIONS**

**§ 236.326 Mechanical locking removed or disarranged; requirement for permitting train movements through interlocking.**

When mechanical locking of interlocking machine is being changed or is removed from the machine, or locking becomes disarranged or broken, unless protection equivalent to mechanical

locking is provided by electric locking or electric circuits, train movements through the interlocking shall not be permitted until each switch, movable-point frog or derail in the route is spiked, clamped or blocked in proper position so that it cannot be moved by its controlling lever, and then train movements shall not exceed restricted speed until the interlocking is restored to normal operation. It will not be necessary to comply with this requirement at interlockings where protection is in service in accordance with section 303, provided that the signal controls are arranged so that the signals cannot display an aspect the indication of which is less restrictive than “proceed at restricted speed.”

**§ 236.327 Switch, movable-point frog or split-point derail.**

Switch, movable-point frog, or split-point derail equipped with lock rod shall be maintained so that it can not be locked when the point is open three-eighths inch or more.

[49 FR 3385, Jan. 26, 1984]

**§ 236.328 Plunger of facing-point lock.**

Plunger of lever operated facing-point lock shall have at least 8-inch stroke. When lock lever is in unlocked position the end of the plunger shall clear the lock rod not more than one inch.

**§ 236.329 Bolt lock.**

Bolt lock shall be so maintained that signal governing movements over switch or derail and displaying an aspect indicating stop cannot be operated to display a less restrictive aspect while derail is in derailing position, or when switch point is open one-half inch or more.

**§ 236.330 Locking dog of switch-and-lock movement.**

Locking dog of switch-and-lock movement shall extend through lock rod one-half inch or more in either normal or reverse position.

**§§ 236.331–236.333 [Reserved]**

**§ 236.334 Point detector.**

Point detector shall be maintained so that when switch mechanism is locked

### § 236.335

in normal or reverse position, contacts cannot be opened by manually applying force at the closed switch point. Point detector circuit controller shall be maintained so that the contacts will not assume the position corresponding to switch point closure if the switch point is prevented by an obstruction, from closing to within one-fourth inch where latch-out device is not used, and to within three-eighths inch where latch-out device is used.

### § 236.335 Dogs, stops and trunnions of mechanical locking.

Driving pieces, dogs, stops and trunnions shall be rigidly secured to locking bars. Swing dogs shall have full and free movement. Top plates shall be maintained securely in place.

### § 236.336 Locking bed.

The various parts of the locking bed, locking bed supports, and tappet stop rail shall be rigidly secured in place and aligned to permit free operation of locking.

### § 236.337 Locking faces of mechanical locking; fit.

Locking faces shall fit squarely against each other with a minimum engagement when locked of at least one-half the designed locking face.

### § 236.338 Mechanical locking required in accordance with locking sheet and dog chart.

Mechanical locking shall be in accordance with locking sheet and dog chart currently in effect.

### § 236.339 Mechanical locking, maintenance requirements.

Locking and connections shall be maintained so that, when a lever or latch is mechanically locked the following will be prevented:

(a) *Mechanical machine*—(1) *Latch-operated locking*. Raising lever latch block so that bottom thereof is within three-eighths inch of top of quadrant.

(2) *Lever-operated locking*. Moving lever latch block more than three-eighths inch on top of quadrant.

(b) *Electromechanical machine*—(1) *Lever moving in horizontal plant*. Moving lever more than five-sixteenths inch when in normal position or more than

### 49 CFR Ch. II (10–1–12 Edition)

nine-sixteenths inch when in reverse position.

(2) *Lever moving in arc*. Moving lever more than 5 degrees.

(c) *Power machine*—(1) *Latch-operated locking*. Raising lever latch block to that bottom thereof is within seven thirty-seconds inch of top of quadrant.

(2) *Lever moving in horizontal plane*. Moving lever more than five-sixteenths inch when in normal position or more than nine-sixteenths inch when in reverse position.

(3) *Lever moving in arc*. Moving lever more than 5 degrees.

### § 236.340 Electromechanical interlocking machine; locking between electrical and mechanical levers.

In electro-mechanical interlocking machine, locking between electric and mechanical levers shall be maintained so that mechanical lever cannot be operated except when released by electric lever.

### § 236.341 Latch shoes, rocker links, and quadrants.

Latch shoes, rocker links, and quadrants of Saxby and farmer machines shall be maintained so that locking will not release if a downward force not exceeding a man's weight is exerted on the rocker while the lever is in the mid-stroke position.

### § 236.342 Switch circuit controller.

Switch circuit controller connected at the point to switch, derail, or movable-point frog, shall be maintained so that its contacts will not be in position corresponding to switch point closure when switch point is open one-fourth inch or more.

### INSPECTION AND TESTS

### § 236.376 Mechanical locking.

Mechanical locking in interlocking machine shall be tested when new locking is installed; and thereafter when change in locking is made, or locking becomes disarranged, or tested at least once every two years, whichever shall occur first.

[49 FR 3385, Jan. 26, 1984]